



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/544,000	04/06/2000	David A. Cathey	3976US (98-0063)	7982

7590

07/30/2002

James R Duzan
Trask Britt & Rossa
PO Box 2550
Salt Lake City, UT 84110

EXAMINER

ZAMANI, ALI A

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 07/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/544,000

Applicant(s)

CATHEY, DAVID A.

Examiner

Ali A. Zamani

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8, 10, 12-21, 23 and 24 is/are rejected.
- 7) ☒ Claim(s) 5, 9 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 2674

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

2. Claims 1-4, 6-8, 10 and 13-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Shipman (US 6,217,183 B1).

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. IN regard to claims 1-4, 6-8, 10 and 13-14 Shipman teaches a remote computer keyboard comprising: an enclosure member (13); a printed circuit board (21 positioned in enclosure member (13) ; a plurality of depressible key switch (9) devices array above printed circuit board (39); a key cap (310) mounted atop each switch device (33) of plurality, each cap having at least one identifying graphic symbol (35) formed on an upper surface thereof; and luminescent

Art Unit: 2674

material (LEDs) illuminating at least one graphic symbol on each cap (see Figs 1-4), light rays (53) received upon the light channeling membrane's (37) outer surface is channeled throughout the translucent material to the key members (11) a diaphragm (19) having a plurality of elastic projections (20) for biasing the key members (11) upwardly (see Figs 4-7). Preferably, the upper surface of the light channeling membrane (37) is coated or otherwise constructed with an opaque coating (51) so that only the upper surfaces (33) of the key members (11) are seen to illuminate by the keyboard operator and a light source is comprised of one or more light strips (45) which can be either liquid emitting diodes (LED) or (LCD) systems on other constructions known to those skilled in the art which emit light upon the exterior side or bottom surfaces of the light channeling membrane (37) and also the light source can be made up of one or more fiber optic cables (47) provide a highly illuminescient surface where the curved cylindrical surface has been notched, knurled, scratched or otherwise flawed, the fibrotic cables (47) are routed alongside, below or embedded in the light channeling membrane (37) so that light rays (53) emitted from the cylindrical outer surface of the fiber optic cables (47) are received by the translucent material and channeled within the membrane's translucent region (43) to the key members (11) which all function as claimed.

Claim Rejections - 35 USC § 103

4. Claims 12, 15-21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shipman in view of Klein. (US Pat. No. 5,925,110).

Art Unit: 2674

In regard to claims 15-21 and 23-24, Shipman is discussed above. Shipman substantially teach the above claimed limitations except for teaching a “chemical source of electrical power”. However, Klein teaches a method of determining the state of a keyboard key is disclosed, more particularly, to the use of a wireless keyboard with a low power consumption (see the abstract). Klein substantially teaches the switched power supply (108) may receive power from a plurality of the sources (see Figs. 1 and 3) and power may be supplied to the switched power supply (108) from a battery (117) that is recharged by a RF signal (col. 5, lines 23-44). Thus, it would have been obvious to one of ordinary skill in the art to utilize the chemical source of electrical power of Klein in the keyboard of Shipman in order to provide a durable lighting keyboard system that results in a durable and low maintenance with a low power consumption.

Allowable Subject Matter

5. Claim 11 is allowable over prior art of record.

The following is an examiner's statement of reasons for allowance; the prior art does not teach:

“ A remote computer keyboard comprising: an enclosure member, a printed circuit board positioned in the enclosure member; a plurality of depressible key switch devices arrayed above said printed circuit board; and a key cap mounted atop each switch device of said plurality of switch devices, each key cap having at least at least one identifying graphic symbol formed from material embedded with tritium.

Art Unit: 2674

6. Claims 5, 9, 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Takami and Nova et al. made of record to show various types of illuminated keyboard.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Zamani whose telephone number is (703) 308-6414. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerepe, can be reached on (703) 305-4709.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

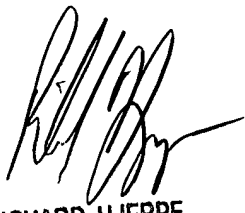
Art Unit: 2674

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is (703) 306-0377.

Ali Zamani

July 26, 2002



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600